

REMARKS

I. Amendments

Page 1 of the specification is amended to include a reference that claims the benefit of the filing of a provisional application. Support for this benefit claim is found in the application transmittal letter filed with the application in which a request is made to amend the specification to include language claiming the benefit of the provisional application.

Pages 6 and 7 of the specification are amended to change the letter designation for each of the described process steps e), f), g), and h) to respectively be a), b), c) and d). The original designation of the process steps described on these pages were in error. The designation should correspond to those described in the summary section of the specification and elsewhere in the specification.

Independent claims 1, 9 and 10 are amended. A common amendment to each of the three claims is the removal of the language allowing for the optional presence in the catalyst composition of the metal hydrogenation component. With this change, the recited hydrocracking catalyst must contain a metal hydrogenation component. Also a common amendment to the independent claims is the addition of language that recites that the metal hydrogenation component is selected from a group of listed metals. Support for this amendment is found in the specification at page 13, line 25 – page 14, line 13.

Claim 9 is further amended to clarify that the zeolite component of the recited carrier is the high surface area zeolite made by the recited method.

New claims 12-27 are added to the specification. Claims 12-16 are directed to a composition. The independent claim 12 defines a high surface area zeolite having properties that are different from those of the original claim 1 and which distinguish the zeolite over those described in the cited prior art.

New claims 17-22 are directed to a process for hydrocracking a gas oil type feedstock to selectively yield middle distillate.

New claims 23-27 are dependent claims that depend either directly or indirectly from claim 9. These claims provide further definition to the claimed hydrocracking catalyst.

II. First §102(b) Rejection

Claims 1-5 and 9 have been rejected under 35 U.S.C. 102(b); because, they are allegedly anticipated by publication WO 95/15208 of Amiridis et al. This rejection is rendered moot due to the amendments to independent claims 1, 9, and 10 that provide for the requirement that the catalyst compositions contain a hydrogenation component selected from a specific group of metals.

III. Second §102(b) Rejection

Claims 1-5 and 9 have been rejected under 35 U.S.C. 102(b); because, they are allegedly anticipated by the Scherzer *Journal of Catalysis* article. This rejection is rendered moot due to the amendments to independent claims 1, 9, and 10 that provide for the requirement that the catalyst compositions contain a hydrogenation component selected from a specific group of metals.

IV. First §103(a) Rejection

Claims 1-5 and 9-11 have been rejected under 35 U.S.C. 103(a) as being unpatentable over the Cooper et al patent (U.S. 5,242,677). This rejection is rendered moot due to the amendments to independent claims 1, 9, and 10 that provide for the requirement that the catalyst compositions contain a hydrogenation component selected from a specific group of metals.

V. Second §103(a) Rejection

Claims 6-8 have been rejected under 35 U.S.C. 103(a) as being unpatentable over the Ward patent (U.S. 5,536,687) in view of the Cooper et al patent (U.S. 5,242,677). This rejection is rendered moot due to the amendments to independent claims 1, 9, and 10 that provide for the requirement that the catalyst compositions contain a hydrogenation component selected from a specific group of metals.

VI. New Claims 12-27

Claims 12-16 are directed to a composition. Claim 12 is an independent claim from which claims 13-16 depend either directly or indirectly from claim 12.

Claims 17-22 are directed to a middle distillate selective hydrocracking process for processing a gas oil feedstock and yielding a middle distillate product. Claim 17 is an independent claim and claims 18-22 depend either directly or indirectly from claim 17.

Claims 23-27 are dependent claims that depend either directly or indirectly from the hydrocracking catalyst composition claim 9. It is noted that the Examiner has stated that claim 9 defines the composition by the way it is made, but as claim 9 is now amended, it requires only that the high surface area zeolite component of the hydrocracking catalyst composition is to be made by a certain method. The other components are not required to be made by a specified method.

VII. Conclusion

In view of the amendments to the originally filed independent claims and considering the new claims, the applicants respectfully submit that the claims now pending in this application are allowable over the cited references. Early allowance of claims 1-27 is, therefore, respectfully requested.

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